COURSE DETAIL

FIELD METHODS IN ENVIRONMENTAL SUSTAINABILITY

Country Netherlands

Host Institution Leiden University College

Program(s) Leiden University College

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Environmental Studies

UCEAP Course Number 180

UCEAP Course Suffix

UCEAP Official Title FIELD METHODS IN ENVIRONMENTAL SUSTAINABILITY

UCEAP Transcript Title FIELD METHODS ENV S

UCEAP Quarter Units 6.00

UCEAP Semester Units 4.00

Course Description

This is an intensive 7-day course that takes place after the spring semester has ended, focusing on practical exercises in recording environmental key parameters, subsequent data evaluation, and report writing. The training of skills is embedded in a context of learning about foundational landscape processes and legacies of human impact in a high-mountain environmental setting, and resulting implications for developing forward-thinking concepts of sustainable land use under climate change. The course introduces students to different types of field methods and techniques used in environmental Earth sciences. The methods taught are widely applied in a variety of fields of environmental sciences such as hydrology, ecology, geomorphology, pedology, and land planning. This kind of information is further used in international development, agricultural sciences, natural resource management, and engineering. At the content level, the tfield methods taught are employed to develop an understanding of the interdependencies of subsurface (geology, soils, groundwater) and surface systems (vegetation, land use, natural hazards) using the example of a high mountain environment. More specifically, the course explores the current state of a select range of landscape functions, their evolution over time, and options for developing sustainable land use strategies and hazard management. The scope includes accounting for climate change, which demonstrably already does alter the boundary conditions for ecosystem service functions. This challenges existing concepts of sustainable land use by agriculture and tourism in the area under study. Thus, the course addresses one of the most pressing issues in environmental sciences by connecting climate change and guestions of sustainable land uses and hazard prevention. Recommended prerequisite for this course is an introductory sustainability or earth systems science course.

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title FIELD METHODS IN ENVIRONMENTAL SUSTAINABILITY

Host Institution Campus

LUC The Hauge- Level 2

Host Institution Faculty

Host Institution Degree

Host Institution Department

Earth, Energy, and Sustainability

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